



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,647	08/19/2002	Patrice Toillon	219872US2 XPCT	7484
22850	7590	10/04/2007	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.			LEE, BETTY E.	
1940 DUKE STREET			ART UNIT	
ALEXANDRIA, VA 22314			PAPER NUMBER	
			2616	
			NOTIFICATION DATE	
			DELIVERY MODE	
			10/04/2007	
			ELECTRONIC	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

## Office Action Summary

Application No.

10/049,647

Applicant(s)

TOILLON ET AL.

Examiner

Betty Lee

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 33-60 and 62-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-50 and 62-68 is/are rejected.
- 7) ☒ Claim(s) 51-60 and 69 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 33-69 are objected to because of the following informalities:

Claim 33 line 1 recites "a multichannel numeric switch". The term "numeric" should be changed to --- digital ---.

Claim 33 line 5 recites "selective switching of multifield data grids". It is suggested that the term "grids" be changed to --- cells --- or --- packets ---.

Claims 34-60 and 62-69 have similar problems.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 63 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 63 depends from cancelled claim 61.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims **33-37, 39, 40, 42, 43, 45, 46, 48, 49, 62, and 64-67** are rejected under 35 U.S.C. 102(e) as being anticipated by Sherer et al. (US 6,115,376).

**Regarding claims 33, 64, 65, and 66**, Sherer teaches a monitoring device for a multichannel numeric switch (see Fig. 1 Box 10), the switch including a connecting interface for connecting physical connection circuits to a transmission medium (see Fig. 2 Items 34-37), defining at least one of source and destination ports (see Fig. 1 Items 21-25), the connecting interface including a physical layer and a logical layer (see Fig. 2 "Port 0 (Mac Filter)" and Box 30), and a processing unit for carrying out selective switching of multifield data grids between the different ports (see Fig. 1 Box 10), the monitoring device comprising:

a probe unit coupled selectively to the connecting interface, configured to observe data between the physical layer and the logical layer (see Fig. 2 "Port 0 (Mac Filter)"); and

a monitoring unit configured to analyze contents of at least part of the data grids probed by the probe unit (see col. 4 lines 51-60), generate and output a warning message to the logical layer when the part analyzed does not meet a selected condition (see col. 5 lines 12-14), and trigger rejection of a grid (see col. 4 lines 51-60) probed by the probe unit upon transmission of the warning message (see col. 6 lines 19-26).

Art Unit: 2616

**Regarding claims 34 and 35**, Sherer further teaches the monitoring unit is further configured to analyze contents of at least part of a field of the data grids probed by the probe unit (see col. 4 lines 51-60).

**Regarding claim 36**, Sherer further teaches the probe unit is configured to probe grids including at least one of a logic channel field, a physical channel field, and a data field (see col. 4 lines 51-60).

**Regarding claim 37**, Sherer further teaches the probe unit is configured to probe grids including at least one of a grid start field, a destination port address field, a source port address field, and a data field (see col. 4 lines 50-61).

**Regarding claims 39 and 40**, Sherer further teaches the monitoring unit comprises a table of correspondence specifying for each port connected to the connection circuits a list of authorized grids comprising at least the ports with which the respective port can exchange grids (see col. 6 lines 6-14; The MAC address is linked to the network interface card, which is connected to a port on the device.), and the monitoring unit is further configured to compare contents of this table of correspondence to that of at least one of the fields of the grid being transferred (see col. 6 lines 19-26), to generate the warning message when its field or fields analyzed designate a port that does not have a correspondence with the source port transmitting the grid, this correspondence forming a chosen condition (see col. 6 lines 19-45).

**Regarding claim 42**, Sherer further teaches the analyzed field or fields is or are chosen from at least the logic channel field and the physical channel field (see col. 6 lines 19-26).

**Regarding claim 43,** Sherer further teaches the analyzed field or fields is or are chosen from at least the destination port address field of the grid and the source port address field of the grid (see col. 6 lines 6-26).

**Regarding claim 45,** Sherer further teaches the table of correspondence includes for each source or destination port at least one list of associated destination addresses, a list of associated source addresses, a list of grid flux types authorized on the port, accompanied by temporal features of each of the fluxes, and a list of the grid lengths authorized to circulate on the port (see col. 6 lines 6-26; The table includes, MAC addresses.).

**Regarding claim 46,** Sherer further teaches the table of correspondence is stored in a modifiable memory selected from at least a live memory, a flash memory, and an assembly of registers each associated with a port and having an individually configurable content (see col. 6 lines 19-41; Addresses can be added and removed form the table for specific ports.).

**Regarding claim 48,** Sherer further teaches the monitoring unit is configured to effect its comparison on the logic channel field, then on the physical channel field (see col. 6 lines 19-41).

**Regarding claim 49,** Sherer further teaches the monitoring unit is configured to effects its comparison on the destination address field, then on the source address field (see col. 6 lines 19-26; The comparison is done between the specific port and the MAC address.).

**Regarding claim 62**, Sherer further teaches the monitoring unit is configured, upon transmission of the warning message, to trigger the processing unit to reject the grid probed by the probe unit (see col. 6 lines 19-26).

**Regarding claim 67**, Sherer teaches a monitoring device for a multichannel numeric switch (see Fig. 1 Box 10), the switch including a connecting interface for connecting physical connection circuits to a transmission medium (see Fig. 2 Items 34-37), defining at least one of source and destination ports (see Fig. 1 Items 21-25), the connecting interface including a physical layer and a logical layer (see Fig. 2 "Port 0 (Mac Filter)" and Box 30), and a processing unit for carrying out selective switching of multiframe data grids between the different ports (see Fig. 1 Box 10), the monitoring device comprising:

a probe unit coupled selectively to the connecting interface (see Fig. 2 "Port 0 (Mac Filter)"); and

a monitoring unit configured to analyze contents of at least part of the data grids probed by the probe unit (see col. 4 lines 51-60), and configured to generate a warning message to the logical layer when the part analyzed does not meet a selected condition (see col. 5 lines 12-14)

where the probe unit is configured to probe grids including at least one of a logic channel field, one physical channel field, and a data field (see col. 4 lines 51-60),

where the monitoring unit comprises a table of correspondence specifying for each port connected to the connection circuits a list of authorized grids comprising at least the ports with which the respective port can exchange grids (see col. 6 lines 6-14;

The MAC address is linked to the network interface card, which is connected to a port on the device.),

where the monitoring unit is further configured to compare contents of this table of correspondence to that of at least one of the fields of the grid being transferred (see col. 6 lines 19-26), to generate the warning message when its field or fields analyzed designate a port that does not have a correspondence with the source port transmitting the grid, this correspondence forming a chosen condition (see col. 6 lines 19-45).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein



were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims **38, 41, 44, 47, 50, and 68** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sherer et al. (US 6,115,376) in view of Mori (US 6,172,991).

**Regarding claim 38**, Sherer teaches a probe unit configured to probe grids (see col. 4 lines 51-60). Sherer teaches all the subject matter of the claimed invention with the exception of the probing at least one of a virtual path identifier field, a virtual channel identifier field, a payload type field, and a data field.

However, Mori teaches probing at least one of a virtual path identifier field, a virtual channel field, a payload type field, and a data field (see col. 3 lines 49-67). Thus, it would have been obvious to one of ordinary skill in the art to use the system of Mori in the system of Sherer. The motivation for doing so is to make the system more flexible and allow it to be used in an ATM environment.

**Regarding claims 41**, Sherer further teaches the monitoring unit comprises a table of correspondence specifying for each port connected to the connection circuits a list of authorized grids comprising at least the ports with which the respective port can exchange grids (see col. 6 lines 6-14; The MAC address is linked to the network interface card, which is connected to a port on the device.), and the monitoring unit is further configured to compare contents of this table of correspondence to that of at least

one of the fields of the grid being transferred (see col. 6 lines 19-26), to generate the warning message when its field or fields analyzed designate a port that does not have a correspondence with the source port transmitting the grid, this correspondence forming a chosen condition (see col. 6 lines 19-45).

**Regarding claim 44**, Sherer teaches all the subject matter of the claimed invention with the exception of the analyzed field or fields is or are chosen from at least the virtual path identifier field and the virtual channel identifier field. However, Mori teaches the analyzed field or fields is or are chosen from at least the virtual path identifier field and the virtual channel identifier field (see col. 5 lines 16-32). Thus, it would have been obvious to one of ordinary skill in the art to use the system of Mori in the system of Sherer. The motivation for doing so is to make the system more flexible and allow it to be used in an ATM environment.

**Regarding claim 47**, Sherer further teaches the memory is configured to permit access by writing and/or reading for monitoring (see col. 6 lines 19-41).

**Regarding claim 50**, Sherer teaches the monitoring unit is configured to effect a comparison based on data contained in a table and fields in the cell (see col. 4 lines 51-60). Sherer teaches all the subject matter of the claimed invention with the exception that the comparison is done between the data contained in a table and the virtual path identifier field and the virtual channel identifier field.

However, Mori teaches using the virtual path identifier and virtual channel identifier of a cell to filter a packet (see col. 5 lines 16-32). Thus, it would have been obvious to one of ordinary skill in the art to use the system of Mori in the system of

Art Unit: 2616

Sherer. The motivation for doing so is to make the system more flexible and allow it to be used in an ATM environment.

**Regarding claim 68**, Sherer teaches all the subject matter of the claimed invention with the exception of the monitoring unit is further configured to determine whether an address of a destination grid of the data does not correspond to the port analyzed by the respective monitoring unit. However, Mori teaches the monitoring unit is further configured to determine whether an address of a destination grid of the data does not correspond to the port analyzed by the respective monitoring unit (see col. 4 lines 19-56; The filtering table is searched based on the TCP/UDP port number to see if the data is allowable.).

***Allowable Subject Matter***

10. Claims **51-60 and 69** would be allowable if rewritten to overcome the objections set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. Claim **63** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cioli et al. (US 6,510,151), Flanders et al. (US 6,041,058), and Doherty et al. (US 6,650,639) are all cited to show systems which are considered pertinent to the claimed invention.

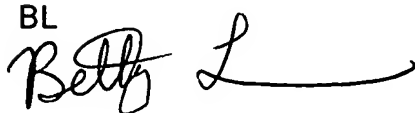
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betty Lee whose telephone number is (571) 270-1412. The examiner can normally be reached on Monday-Thursday 9-5 EST and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BL

A handwritten signature in black ink, appearing to read "Betty L.", with a long horizontal flourish extending to the right.A handwritten signature in black ink, appearing to read "Hassan Kizou", with a large circular flourish at the end.

HASSAN KIZOU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600